

THE BEAN BAG

Current Research on Legumes



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An Historical Note: The First International Congress of Systematic and Evolutionary Biology (ICSEB) was something new under the sun in several respects. For the first time it brought together botanical and zoological practitioners of systematics for the interchange of ideas, philosophy, methodology, and goals; this was the principal purpose of the Congress organizers. There was another less evident purpose, however; it provided an opportunity for specialists in various groups of organisms to convene informal meetings to discuss how they might cooperate more closely with each other and with scientists of all sorts whose work has the potential for providing new data for the synthesis that is the essence of systematic biology.

So it was that the devotees of the Leguminosae who were at the Congress came together for a very interesting meeting. One of the conclusions reached (there were not all that many!) was that we needed to be in touch with each other regularly and that a newsletter should be undertaken by someone. Initially, Tom Elias (Carey Arboretum of the New York Botanical Garden) volunteered to produce such a publication and he set about the task with enthusiasm; many of you completed a questionnaire which he mailed out rather widely. However, his administrative duties as director of the Arboretum finally forced him to give up the task and the editors listed above have stepped into the breach. How well we do at it is strongly dependent on your assistance, about which, more follows.

Credit for the name of the newsletter should also be recorded. It was proposed very early, perhaps even during the Boulder ICSEB meetings, by Mary Kalin Arroyo who was at that time assisting Howard Irwin with his research on Brazilian legumes but has since taken a position at the Universidad Central de Venezuela in Caracas. Responses to our 10 March letter to most of you have contained a few comments on the name, mostly favorable. It was not intended to be frivolous, as we believe the content of future issues will prove, but a rather fanciful title for what will necessarily be a highly diversified collection of news and notes of interest to leguminologists.

What Will the Newsletter Be? "Que sera sera" may not be quite the correct answer but we mean to say, the BEAN BAG will be whatever all of us together make of it. But in the beginning the editors believe that what is wanted is news of new and completed research in systematics, new publications, honors conferred on any of our number, changes of address, requests for research materials, expeditions and other field studies (especially news of opportunities for participation), and other miscellany of interest to legume-lovers of the world. The newsletter will

not be able to take items more than about a fourth page in length (typewritten) and all items will have to have a direct bearing on the systematic botany of the Leguminosae. (Can we agree from the outset that both the collective view and the two or three family view of the assemblage are admissible in these pages? We happen to be "one family-three subfamilies" in our outlook.) Important as they are to human welfare, new strains of cultivated crop plants, for example, will not be reported on here, unless they have taxonomic significance. If we grow too large, too rapidly, costs may exceed the resources available to us.

Enclosed with each copy of the BEAN BAG you will find a news-collecting outline which you should complete insofar as necessary to bring the information about you and your work up to date, and return the form to us. We will use these data to put together the next issue and by so doing reduce the research time we expend in putting together the text each time. Your prompt cooperation will be greatly appreciated! But please send the form back by the end of September. ----- The Editors.

Research on Neotropical Legumes in Argentina. (Editors' Note: This account was provided in August 1973 and then brought up to date in April 1975 by Dr. Burkart, just before his untimely death from a stroke on 26 April. It was already in manuscript form and publication of his notes seems to us to be a small memorial to a man whose scientific work has contributed so much to our knowledge of legumes.) Arturo Burkart has written us a fulsome account of the many legume studies at the Instituto de Botanica Darwinio in Buenos Aires and at other research centers in the country; the following is a digest of this very vigorous program, much of which is under his direction or supervision, or with his collaboration. Lic. Lilian Dora Bravo is monographing the Argentine species of Cassia using traditional as well as recently evolved methodologies.... Lic. Edith V. Gomez de Rabini is studying the local species of Astragalus, beginning with those of Patagonia.... Lic. Diana Murray began a study of Lupinus in northwestern Argentina where there are some 15 poorly known species, and Dra. Betty Sorarú is continuing the project.... Dra. Caccavari de Filice is engaged in palynological studies of the Mimosoideae of Argentina and has already published systematic accounts of the pollen of the Acacieae, Piptadenieae, and Adenantherae; currently she is working with the Mimoseae and in the case of Mimosa she has extended the series and sections in South America. She is also studying the pollen of Dolichos monticola, Dolichopsis paraguariensis and Vigna luteola.... Prof. Oscar Vilchez (La Molina University in Lima, Peru), during a year's study of Peruvian legumes with Dr. Burkart, revised Dalea, Zornia, and Vicia. Now back in Peru, he is working on a taxonomic survey of native forage legumes.... Ing. Agr. Anibal Vera V. (Universidad de Oriente, Monagas, Venezuela) spent three months in 1973 with Dr. Burkart becoming better acquainted with the taxonomy of Venezuelan legumes. He is working on a revision of Venezuelan Zornia species (about 13) and continues to study herbaceous legumes and forage tree-legumes.... Arturo Burkart has contributed in the past few years floristic treatments of the legumes for the "Flora de la Provincia de Buenos Aires", "Flora ilustrada de Entre Rios", the "Flora Patagonica", the "Flora de Jujuy", and the Mimosoideae for the "Flora Catariense" (Brazil). The latter region is especially rich in species of Mimosa with about 45 kinds, of which six appear to be new to science. Monographic revisions are under way of Phaseolus, Adesmia, Zornia (Argentina, Uruguay, Southern Brazil), as well as continuing studies of Galactia and Rhynchosia. In collaboration with O. Solbrig, Beryl Simpson, and J. H. Hunziker, Burkart has completed a world monograph of Prosopis (4 species in Asia and Africa, 40 in the New World) which is being published by the Journal of the Arnold Arboretum. This is part of an international IBP project which promises to have great significance in the reforestation of extremely arid regions. For example, P. tamarugo in the Atacama Desert of Northern Chile has been planted for sheep forage; now this spiny desert legume gives

browse sufficient to maintain 16 sheep per hectare of forest. Most recently, Burkart is cooperating in a program studying the fatty acid composition of seeds of native legumes.... Ing. Agr. Antonio Krapovickas continues a comprehensive research program on the systematics and evolution of Arachis. He and his collaborators have collected topotype material during extensive travels in Bolivia, Paraguay, and Brazil to obtain living material which he cultivates experimentally, making crosses and studying the characteristics of the progeny. As many as 20 new species of the genus will require description eventually and several promising, highly productive strains have been reported. (More complete information concerning these projects may be obtained directly from Instituto de Botanica Darwinion, San Isidro, Buenos Aires, ARGENTINA.)

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Research Materials Sought. The most frequently requested material is seed, at least partly because of the numerous research projects around the world on the chemistry of the family. B. A. Krukoff (New York Botanical Garden) heads one such effort seeking seeds of as many legume genera as possible, especially of tropical ones; J. A. Duke (U. S. Department of Agriculture, Beltsville, Md.) and his associate C. R. Gunn want seeds for the USDA seed collection and to attempt to germinate in order to obtain seedlings of as many legume genera as possible; H. D. L. Corby (University of Rhodesia) hopes to find colleagues who will help him obtain seed from out-of-the-way places; etc, etc.

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Soybean Genetics Newsletter. The second volume of the Soybean Genetics Newsletter is now being prepared by Reid G. Palmer, U. S. Department of Agriculture, Iowa State University. The focus of this newsletter is the genetics and breeding of the Soybean and its immediate relatives, broadly interpreted to include areas relating to genetics in fields such as taxonomy, pathology, entomology, physiology, and biochemistry. It is hoped that the newsletter can reach interested persons in as many disciplines as possible. If you would like to receive the Soybean Genetics Newsletter, write to Reid G. Palmer, USDA, Soybean Genetics Newsletter, Department of Agronomy, Iowa State University, Ames, Iowa 50010 USA.

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Your Colleagues. The balance of this issue is the list of names and addresses of those who wish to receive the BEAN BAG, together with a few words after each entry indicating the general interests of the individual, insofar as this information is available to us. If the descriptors after your entry are very incorrect, we can include a correction in the next issue.

- ACEBES GINOVES, J. R., Departamento de Botanica, Facultad de Ciencias, Universidad de Laguna, Tenerife, SPAIN.
- ALLEN, O. N., & Ethel K., 4142 Hiawatha Drive, Madison, WI 53711 USA (Nitrogen fixation).
- ALTSCHUL, Siri von Reis, 45 East 89 Street, Apt. 30A, New York City, NY 10028, USA (Anadenanthera).
- ANDERSON, D. M. W., Chemistry Department, The University, West Mains Road, Edinburgh EH9 3JJ SCOTLAND (Chemotaxonomy).
- AREVALO DE DELGADO, Alicia, Sociedad Botanica del Ecuador, P.O. Box 455, Guayaquil, ECUADOR (Spartium junceum).
- BARNEBY, Rupert, New York Botanical Garden, Bronx, NY 10458 USA (Cassia of Brazil).
- BEAUCHAMP, R. Mitchell, P.O. Box 985, National City, CA 92050 USA (Acacia).
- BELL, E. A., Department of Plant Sciences, University of London, King's College, 68 Half Moon Lane, London, SE24 9JF, ENGLAND (Non-protein amino acids chemotaxonomy).
- BERNARD, Richard L., U.S. Regional Soybean Lab., 160 Davenport Hall, University of Illinois, Urbana, IL 61801 USA.
- BOCK, Jane, E.P.O. Biology Department, University of Colorado, Boulder, CO 80302 USA (Melilotus).
- BRENAN, J. P. M., Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE, ENGLAND (Mimosoideae and Caesalpinioideae).
- BRUMMITT, R. K., Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AE, ENGLAND.
- BURKART, Arturo (deceased April 1975), Instituto de Botanica DARWINION, Lavarden y Del Campo, San Isidro FBM, Correo Martinez, Buenos Aires, ARGENTINA (General monographic).
- CARTER, Annetta, Department of Botany, Herbarium of the University of California, Berkeley, CA 94720 USA.
- CHRISTIAN, James A., Department of Botany & Bacteriology, Louisiana Tech Univ., Ruston, LA 71270 USA.
- CLEWELL, A. F., Department of Biological Science, Florida State University, Tallahassee, FL 32306 USA (Floristics of Pinelands).
- CORBY, H. D. L., Department of Botany University of Rhodesia, P.O. Box 167MP, Mount Pleasant, Salisbury, RHODESIA.
- COWAN, R. S., Department of Botany, Smithsonian Institution, Washington, D.C. 20560 USA (Neotropical Caesalpinioideae).

- CRISTOFOLINI, Giovanni, Instituto Botanico, Universita, via Cumano 2, 34100 Trieste, ITALY (Serology & morphology of Genisteae).
- DARDENNE, Gaston A., Chimie Organique et Biologique, Faculte des Sciences Agronomiques, 5800 Gembloux, BELGIUM (Free amino acids & peptides).
- DOLLAHITE, J. W., Veterinary Toxicology & Entomology Laboratory, USDA, P.O. Drawer GE, College Station, Texas 77840 USA.
- DOMINGUEZ, Xorge, A., Instituto Tecnologico y de Estudios Superiores de Monterrey, Sucursal de Correos J., Monterrey, NL, MEXICO.
- DUKE, James A., Plant Taxonomy Laboratory, 115/001 BARC West, Beltsville, MD 20705 USA (Seedling morphology).
- DUNCAN, Wilbur H., Department of Botany, University of Georgia, Athens, GA 30602 USA (Legumes of southeast US).
- DUNN, David B., Botany Department, University of Missouri, Columbia, MO 65201 USA (Systematics of Lupinus).
- DWYER, John D., Missouri Botanical Garden, Tower Grove Avenue, St. Louis, MO 63110 USA.
- EL-GAZZAR, A., Department of Agricultural Botany, Al-Azhar University, Cairo, EGYPT (Numerical taxonomy).
- ELIAS, Thomas S., The Cary Arboretum, Box AB, Millbrook, NY 12545 USA (Mimosoideae).
- EVERIST, S. L., Queensland Herbarium, Meiers Road, Indooroopilly, Queensland, AUSTRALIA 4068.
- FILGUEIRAS, Tarciso de Sousa, 221 Snell Hall, Corvallis, OR 97332 USA.
- FLINT, H. L., Department of Horticulture, Purdue University, West Lafayette, IN 47907 USA.
- FORERO, Enrique, Instituto de Ciencias Naturales, Universidad Nacional, Apartado 7495, Bogota, COLOMBIA (Stryphnodendron).
- GEESINK, R., Rijksherbarium, Schelpenkade 6, Leiden, NETHERLANDS (Old World Papilionatae).
- GENEVOIS, Louis, 18, Rue Duban, 75016 Paris, FRANCE (Biochemistry/Physiology).
- GILLET, John M., National Herbarium, Museum of Natural Sciences, Ottawa KIA OM8, CANADA (Trifolium).
- GORDON, Donald, Biology Department, Mankato State College, Mankato, MN 56001 USA.

- GRAHAM, Alan, Department of Biological Sciences, Kent State University, Kent OH 44242 USA (Palynology).
- GRANT, William F., Genetics Laboratory, MacDonald Campus of McGill University, Ste. Anne de Bellevue, Quebec, CANADA HOA 1C0 (Soybean Research).
- GREAR, John W., Department of Botany, University of Toronto, Toronto, Ontario, CANADA M5S 1A1.
- GUINET, Philippe, Faculte des Sciences, Laboratoire de Palynologie, Place Eugene-Bataillon, 34060 Montpellier Cedex, FRANCE (Palynology).
- GUNN, Charles R., BARC Seed Collection, Plant Taxonomy Laboratory, 238/001, BARC-West, Beltsville, MD 20705 USA (Seed morphology).
- HANELT, Peter, Zentralinstitut f.Genetik u. Kulturpflanzenforschung, DDR-4325 Gatersleben, GERMANY (Chemotaxonomy, biosystematics).
- HARDING, James, Environmental Horticulture, University of California, Davis, CA 95616 USA (Lupinus & Phaseolus).
- HEGNAUER, R., Cobetstraat 49, Leiden, NETHERLANDS (Chemotaxonomy).
- HERIGER, E. P., Sociedade Botanica do Brasil, Universidade de Brasilia, Brasilia, D.F. BRAZIL (Brazilian legumes).
- HEYN, C. C., Department of Botany, The Hebrew University, Jerusalem, ISRAEL (Monographic studies of Papilionatae genera).
- HUNZIKER, Juan H., Depto. de Ciencias Biologicas, Universidad Nacional de Buenos Aires, I. Guiraldes 2620 - Suc. 28, Buenos Aires, ARGENTINA (Biogeography & chemosystematics of Prosopis).
- HOOKE, N. H., Department of Biology, University of Oregon, Eugene, OR 97403 USA.
- IRWIN, Howard S., New York Botanical Garden, New York, NY 10458 USA (South American legumes).
- ISELY, Duane, Department of Botany, Iowa State University, Ames, IA 50010 USA (North American legumes).
- JACKSON, A. H., Department of Chemistry, University College, Cathays Park, Cardiff, CF1 3NR U.K.
- JANZEN, Daniel H., Department of Zoology, University of Michigan, Ann Arbor, MI 48104 USA (Plant/Animal interactions).
- KANIS, A., c/- Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, ENGLAND.

- KINGSOLVER, John M., Systematic Entomology Laboratory, USDA, NHB-W602 (Plant/Animal interactions).
- KOEPPEN, Robert C., U.S. Forest Products Lab., Madison, WI 53705 USA (Wood Anatomy).
- KRUKOFF, B. A., New York Botanical Garden, Bronx Park, NY 10458 USA (General but chemistry of legumes currently).
- KUZMANOV, Bogdan A., Institute of Botany, Bulgarian Academy of Sciences, Sofia-1113, BULGARIA (Cytotaxonomy/chemosystematics).
- KVALEN, R. V., Horticulture Department, Purdue University, West Lafayette, IN 47907 USA.
- LANGENHEIM, Jean H., Thimann Laboratories, University of California, Santa Cruz, CA 95064 USA (Chemotaxonomy, paleobotany, ecophysiology).
- LARSEN, Kai, Botanical Institute, Nordlandsvej 68, DK-8240 Risskov, DENMARK (Caesalpiniaceae of Thailand).
- LARSEN, Supree Saksuwan, Botanical Institute, Nordlandsvej 68, DK-8240 Risskov, DENMARK (Thailand Bauhinia & palynology).
- LASSETTER, J. Stuart, Department of Biological Sciences, Eastern Kentucky University, Richmond, KY 40475 USA (Biosystematics of Vicia).
- LEDINGHAM, G. F., Department of Biology, University of Regina, Regina, Saskatchewan, CANADA S4S 0A2 (Cytology of Astragalus/Oxytropis).
- LEE, David W., Department of Botany, Universiti Malaya, Kuala Lumpur, MALAYSIA (Seed proteins of Malesian legumes).
- LEE, A. T., National Herbarium of N.S.W., Royal Botanic Gardens, Sydney, AUSTRALIA 2000 (Galegeae of Australasia).
- LEE, Yin-Tse (Eric), The Arnold Arboretum, Harvard University, 22 Divinity Avenue, Cambridge, MA 02138 USA (General systematics).
- LEPPIK, E. E., Plant Genetics & Germplasm Institute, USDA, BARC-West, So. Bldg., Rm. 326, Beltsville, MD 20705 USA (Pollination biology).
- LERSTEN, Nels R., Department of Botany and Plant Pathology, Iowa State University, Ames, Iowa 50010 USA (Psoraleae anatomy).
- LESINS, K., Department of Genetics, University of Alberta, Edmonton, Alberta, CANADA T6G 2E1 (Biosystematics of Medicago).
- MACONOCHIE, J. R., Arid Zone Research Institute, Box 291 Alice Springs, NT 5750 AUSTRALIA.
- MAHLER, Win. F., SMU Herbarium, Dallas, TX 75275 USA (Pollen morphology/phylogeny).

- MASLIN, Bruce R., W. A. Herbarium, Jarrah Road, South Perth, Western Australia, 6151, AUSTRALIA (Acacia).
- MAXWELL, Richard H., Division of Natural Sciences, Indiana University Southeast, P.O. Box 679, New Albany, IN 47150 USA (Phaseoleae worldwide).
- MOHLENBROCK, Robert H., Department of Botany, Southern Illinois University, Carbondale, IL 62901 USA (Flora Illinois).
- NEVLING, Jr., L. I., Field Museum, Roosevelt Rd. & Lake Shore Dr., Chicago IL 60605 USA (Mimosoideae).
- NIELSEN, Ivan, Botanical Institute, Nordlandsvej 68, DK-8240 Risskov, DENMARK (Mimosaceae of Thailand).
- NONGONIERMA, Antoine, Department de Botanique, I.F.A.N., B.P. 206, Dakar, SENEGAL (Acacia).
- NOZZOLILLO, Constance, Biology Department, University of Ottawa, 30 Somerset St. E., Ottawa Kin 6N5, CANADA (Anthocyanins/Flavonoids in seedlings).
- OHASHI, H., Department of Botany, University of Tokyo, Hongo 7-3-1, Tokyo 113, JAPAN (Desmodium in Asia).
- OSETROV, V., Semashko 10-65-5, KLEV 142, USSR (Numerical taxonomy).
- POLLILL, R. M., Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE, ENGLAND (African Papilionatae).
- PRANCE, Ghilleen T., Instituto Nacional de Pesquisas da Amazonia, Caixa Postal 478 - 69,00 - Manaus - Amazonas, BRAZIL (Flora of Brazil).
- RANGASWAMI, G., Tamil Nadu Agricultural University, Coimbatore 3, INDIA.
- RAVEN, Peter H., Missouri Botanical Garden, 2315 Tower Grove Avenue, St. Louis, MO 63110 USA (Biosystematics).
- RODRIGUEZ-C., H. A., Facultad de Ciencias Forestales, Universidad de Los Andes, Merida, VENEZUELA (Legume timbers).
- ROMEO, John T., Department of Biological Sciences, Oakland University, Rochester, MI 48063 USA (Non-protein amino acids).
- ROUX, D. G., Department of Chemistry, University of the O.F.S., P.O. Box 339, 9300 Bloemfontein, SOUTH AFRICA (Flavonoid chemistry).
- RUDD, Velva E., P.O. Box 19, Reseda, CA 91335 USA (Fabaceae taxonomy).
- SANCHEZ, Mario Sousa, Instituto de Biologia, Departamento de Botanica, Apdo. Postal 70-233, Mexico 20, D.F. Unam, MEXICO (Lonchocarpus Central America; pollination biology).

- SAUER, Jonathan D., Department of Geography, University of California, Los Angeles, CA 90024 USA (Phytogeography).
- SCHUBERT, Bernice G., Arnold Arboretum, Harvard University, 22 Divinity Avenue, Cambridge, MA 92138 USA (Taxonomy of Desmodium).
- SHAMA, Subodh Kumar, Department of Botany, University of Delhi, Delhi 110007, INDIA.
- SHARMA, G. K., Department of Biological Sciences, University of Tennessee at Martin, Martin, TN 38238 USA (Trifolium as environmental indicators).
- SILVA, Marlene F., Instituto Nacional de Pesquisas da Amazonia, Caixa Postal 478, 69000, Manaus, BRAZIL (Peltogyne taxonomy).
- SOLBRIG, Otto T., Gray Herbarium, Harvard University, 22 Divinity Avenue, Cambridge, MA 02138 USA (Biosystematics).
- STAFLEU, Frans A., Room 28.04.04, Tweede Transitorium, Uithof, Utrecht, NETHERLANDS (Botanical history, bibliography).
- STANKEVICZ, Ann, N.I. Vavilov Institute of Plant Industry, 42, Herzen Street, Leningrad, USSR (Seed morphology).
- STIRTON, Charles H., Botanical Research Institute, Private Bag X101, Pretoria 0001, SOUTH AFRICA (Taxonomy, floral biology, biogeography).
- ST. JOHN, Harold, Bishop Museum, Honolulu, Box 6037, HAWAII 96818 USA (Pacific taxonomy generally).
- STEENIS, C. G. C. J. van, C/O Rijksherbarium, Schelpenkade 6, Leiden, THE NETHERLANDS (Flora of tropics).
- STEIN, Otto L., Department of Botany, University of Massachusetts, Amherst, MA 01002 USA (Developmental anatomy).
- TINDALE, Mary D., Royal Botanic Gardens, Sidney, N.S.W., 2000 AUSTRALIA (Taxonomy and chemotaxonomy of Acacia).
- TURNER, B. L., Department of Botany, University of Texas, Austin, TX 78712 USA (Chemotaxonomy).
- VASSAL, J., Laboratoire de Botanique et Biogéographie, Université Paul Sabatier, 39 Allées J. Guesde, 31077 Toulouse Cedex, FRANCE.
- VERDCOURT, Bernard, Royal Botanic Gardens, Kew, Richmond, Surrey, ENGLAND (African Hedysareae).
- VIDAL, J. E., Laboratoire de Phanérogamie, 16 rue Buffon, 75005 Paris, FRANCE (Caealpiniaaceae of Asia).
- WAINWRIGHT, Colin M., Department of Plant Sciences, University of California, Riverside, CA 92502 USA (Biosystematics of Lupinus).

WELSH, Stanley, Rm. 113-B49 Herbarium, Brigham Young University, Provo, UT 84602 USA (Legumes of Utah).

WILBUR, Robert L., Department of Botany, Duke University, Durham, NC 27706 USA (~~Amorpha~~).

WIT, H. C. D. de, Laboratory for Plant Taxonomy and Plant Geography, 37, General Foulkesweg, Wageningen, NETHERLANDS (Old World Caesalpiniaceae).

WUNDERLIN, Richard P., Department of Biology, University of South Florida, Tampa, FL 33620 USA (Bauhinia).

YAKOVLEV, G., Chemical-pharmaceutical Institute, 14, Prof. Popov Street, 197022, Leningrad, USSR (Tropical legumes; Sophoreae)

LIBRARIES

Library of Rijksherbarium, Schetpenkade 6, Leiden, NETHERLANDS.

National Agricultural Library, Current Serial Records, USDA, Beltsville, MD 20705 USA.

Librarian, CSIRO, Davies Laboratory, Private Mail Bag, P.O. Townsville Q. 4810, AUSTRALIA.

Los Angeles State & County Arboretum, 301 North Baldwin Avenue, Arcadia, CA 91006 USA.

1. Research Projects:

- a. What projects have you completed in last six months?
- b. What new projects have you begun since last issue? Who is involved? What are the objectives?
- c. Note any research projects with which you would like to have some sort of collaboration. What kind of collaboration? How much time? What support might be available?
- d. List legume genera, or other subdivisions of the family, whose size and other factors would enable graduate students to undertake their study. Why would it be important to know more about the group(s)? Is there interest by others to see the work done? Do you know of any support that might be available for any part of such a study?
- e. List names of taxa of which you have expert knowledge, and of which you would be willing to annotate specimens or to provide other assistance:

2. Publications:

- a. List your publications on legume taxonomy, or some aspect thereof, which have been issued since the last BEAN BAG. Full reference to each paper, plus a not more than 10 word characterization of each should be included.

3. Research Needs:

- a. What research materials do you need? What parts? How preserved?
- b. Do you have research materials to offer? What taxa? What parts? How preserved?
- c. Do you need some unusual, difficult-to-locate literature reference? Author, title, date, etc.?

4. Field Studies:

- a. Are you planning an expedition or other sustained data-collection effort in the field? What geographic areas are involved? What are objectives? Is participation by other botanists or other scientists desirable? Possible? If so, under what conditions?
- b. Would you be willing when in the field to collect any research materials for your colleagues? If so, what kinds, how much, under what conditions?

5. Personal News:

- a. Have you been accorded some honor in the last six months? What was it and for what was it given?
 - b. Has your rank or work assignment changed in the past six months?
 - c. Have you changed addresses recently?
6. What do you suggest to improve the newsletter?

Your Name _____